Long-term outcomes for cross-arch stabilizing bridges in periodontal maintenance patients--a retrospective study.


Abstract

BACKGROUND: Cross-arch bridges are used to stabilize teeth for patients with reduced periodontal support. Little is known about technical or biological complications, whether teeth and implants can be combined in this type of bridge and the long-term effects on tooth loss.

MATERIALS AND METHODS: All patients treated in a specialist periodontal practice who received cross-arch stabilizing bridgework and were subsequently maintained for at least 7 years were included in the study. The patients were selected from all patients who underwent initial periodontal therapy after 1986 in a Norwegian periodontal practice. The bridges were assessed for biological and technical complications. Bridges retained by teeth or by a combination of teeth and implants were included in the study.

RESULTS: Ninety-four rigid fixed bridges (77 teeth supported, 17 teeth and implant supported) in 80 patients (46 females, 34 males) were observed for an average of 10 years (range 7-22 years). In four patients, a bridge became loose and had to be re-cemented, and in one case the metal framework of a bridge fractured and the bridge had to be remade. In total, eight abutment teeth were lost from five patients but no implant abutments were lost. Overall, a higher rate of tooth loss was observed for patients provided with stabilizing bridges compared with control maintenance patients not treated with bridgework (p<0.0001); however, the rates in both groups were very low.

CONCLUSION: Cross-arch stabilizing bridges constructed for periodontal patients as part of their periodontal maintenance therapy had few complications and were associated with low rates of abutment tooth loss. Combining teeth and implants did not affect the performance of these bridges.

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